

NTSB Order No. EA-4343

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 29th day of March, 1995

Dockets SE-11890 and
SE-11899

6525

respondents.² The complaints arose in connection with the actions of Respondents Tarris and Thoman, pilot-in-command and first officer, respectively, of a DC-8 cargo-carrying flight for United Parcel Service (UPS). The Administrator alleged that the aircraft departed from Des Moines, Iowa, International Airport when reported winds were in excess of the maximum tail wind component allowed under the operations specifications issued to United Parcel Service and the limitations found in the DC-8 aircraft flight manual. The Administrator sought to suspend the airline transport pilot (ATP) certificate of Respondent Tarris for 120 days for violations of sections 121.3(e),³ 121.537(e) and (f), and 91.9 (now 91.13(a)) of the Federal Aviation Regulations ("FAR," 14 C.F.R. Parts 121 and 91).⁴ Respondent Thoman was

²The two cases were consolidated for hearing. The Administrator filed an appeal brief and respondents filed a reply. Although respondents' brief was filed 12 days late, we will accept it nonetheless, as the Administrator was not prejudiced by the late-filed reply. See Grant v. Administrator, NTSB Order No. EA-3919 at 2-3 (1993).

³The law judge dismissed this allegation at the outset, and the Administrator did not appeal the dismissal.

⁴These regulations read, in pertinent part:

**§ 121.537 Responsibility for operational control:
Supplemental air carriers and commercial operators.**

* * * *

(e) Each pilot-in-command of an aircraft is responsible for the preflight planning and the operation of the flight in compliance with this chapter and the operations specifications.

(f) No pilot may operate an aircraft, in a careless or reckless manner, so as to endanger life or property.

§ 91.9 Careless or reckless operation.

charged with violating FAR section 121.537(f) and the Administrator sought a 30-day suspension of his ATP certificate.

Upon consideration of the briefs of the parties and the record, the Board is constrained to reverse the law judge's decision.

It is undisputed that on July 11, 1989, while respondents taxied toward Runway 12L for takeoff, a thunderstorm was clearly approaching the airport from the northwest. After being told to hold short of the runway, respondents were advised by local control:

2014:32 LC Wind [Shear] Alert center field
wind one eight zero at four veering
to two two zero at five southwest
boundary wind two eight zero at one
eight northwest boundary wind two
niner zero at one niner[.]

(Exhibit (Ex.) A-2 (transcript of tower tape) at 11.)

Under the pertinent operations specifications, takeoff operations may not be conducted if tail wind conditions exceed 10 knots. (Ex. A-8 at 4.) Information channeled into the wind shear alert system was supplied by the center field anemometer, located about 1¼ to 1½ miles southeast of the threshold of Runway 12L, and several other anemometers surrounding the airport, one most notably at the northwest boundary, about ½ mile from where
(..continued)

No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

the aircraft was waiting, and over 2 miles from the center field anemometer. (Transcript (Tr.) at 17-18, 39.)

The next exchange between local control and respondents occurred as follows:

2016:05 LC Upsco twenty nine fifty two Heavy
Des Moines Tower Runway one two
Left back taxi into position and
hold wind two four zero at one zero
gusts two one we may be getting [a]
wind shift ah the southwest
boundary's reading three one zero
at two three **northwest boundary
wind three one zero at one four**
would you ah like to hold there for
maybe a back taxi to thirty
Right[?]

2016:26 UPS We'll take the one two[.]
2952

2016:28 LC Upsco twenty nine fifty two Heavy
roger[.]

(Ex. A-2 at 12, emphasis added.)

Respondent Tarris testified that using Runway 30R would have necessitated a takeoff into the approaching storm and, as such, was unacceptable. (Tr. at 116.) The following communication then took place:

2017:06 LC Upsco twenty nine fifty two Heavy
Wind [Shear] Alert ah numerous
quadrants center field wind two
seven zero at one eight gusts three
three veering [two] niner zero at
two seven northwest boundary wind
two niner zero at one six cleared
for takeoff Runway one two Left[.]

2017:19 UPS Okay cleared for takeoff one two
Left twenty nine ah fifty two
Heavy[.]

Tarris testified that as they turned the aircraft around at the end of the runway, he and Thoman observed the wind sock, located a few hundred feet away to the left of the centerline, and the long grass at the edges of the runway. (Tr. at 118-19.)

He saw that the wind sock was indicating a right-to-left cross wind, and was in a 45-degree position, which he interpreted as meaning a bit "blustery." (Tr. at 119.) Raphael Dinez, the second officer, testified that in light of the wind shear alert, he recomputed the departure speed. He also stated that, from what he and respondents observed, the wind conditions reported to them were not what they were seeing from the cockpit.⁵

Facing away from the approaching storm they took off, using maximum power. All three members of the flight crew stated that it did not rain before or during takeoff and that the takeoff was uneventful. Liftoff occurred, according to Tarris, "abeam with the control tower." (Tr. at 122.)

An FAA safety inspector observed the taxi and takeoff from outside the Flight Standards District Office, located near the threshold of Runway 30L, southwest of Runway 12L/30R and, according to the map of the airport (Ex. A-3), not far from the threshold of Runway 30R. He testified that it was quite windy

⁵When asked what type of analysis he made when deciding to take off, Tarris responded that
Nothing in my field of view physical object [sic]
indicated to us that there was a, actually a
dangerously shifting wind condition at that point or
any type of environment that would approach the
parameters that we have been discussing here all
morning.
(Tr. at 118.)

and had begun to rain somewhere between his location and respondents' aircraft before the aircraft began its takeoff roll.

Based on his observations, he initiated an investigation into the matter.

The law judge found that, although he had no reason to believe the readings from the anemometers were inaccurate, a preponderance of the evidence did not support the conclusion that conditions on the runway at the time of takeoff developed into a tail wind in excess of 10 knots. In weighing all the evidence, the law judge placed great stock in the observations of the 3 crew members and other eyewitnesses. On appeal, the Administrator argues that affirmation of the law judge's decision would allow pilots broad authority to rely on their own weather observations and ignore ATC's reports of weather conditions.

Though not per se controlling, reported winds are extremely strong evidence in the assessment of the conditions on the runway at the time the aircraft began its takeoff roll. The northwest anemometer was only about ½ mile from the aircraft and was between the approaching storm and the aircraft, while the center field anemometer was slightly southeast of the aircraft's liftoff point. Both instruments were registering a prohibitive tailwind component seconds before takeoff.⁶ These readings are more

⁶At center field, the winds were 270° at 18 knots, gusts to 33 knots, veering 290°; at the northwest boundary, 290° at 16 knots. These winds created a tailwind component greater than 10 knots. According to the UPS operations specifications, takeoff is prohibited with a tailwind in excess of 10 knots. They state:

reliable evidence of the wind conditions at takeoff than respondents' observations of the wind sock and the grass near the runway.⁷

Although the Board has accepted a pilot's assessment that he had the required 3-mile ground visibility for takeoff when the
(..continued)

Turbojet Airplane Takeoff Operations in Tailwind Conditions (02/10/89). The certificate holder is authorized to conduct takeoff operations using turbojet airplanes in tailwind conditions of 10 knots or less, provided those operations are conducted in accordance with the FAA approved Airplane Flight Manual. The certificate holder shall conduct these operations in compliance with the operating procedures and performance limitations specified in the FAA approved Airplane Flight Manual for takeoffs in tailwind conditions of 10 knots or less. The certificate holder shall not conduct any turbojet airplane takeoff operations under these operations specifications in tailwind conditions that exceed 10 knots.

(Exhibit A-8 at 4.)

⁷In addition to their testimony and that of the flight engineer, respondents assert that other eyewitness accounts corroborated their assessments of the wind conditions on the runway. For example, a mechanic for UPS testified that he observed the approaching storm, which was about a mile away when respondents' aircraft took off. He stated that the wind was not "gusty," and the aircraft lifted off approximately across from the ATC tower. (Tr. 171-72; Ex. R-2.) The FAA inspector, however, testified that windy and rainy conditions arose before the takeoff roll. See supra at 5.

Respondents also argue that a memo prepared by a UPS flight operations industrial engineer helps to prove that they took off with a tail wind of 10 knots or less. We disagree with their assertion. The memo, using variables similar to those that affected the subject aircraft (such as takeoff weight, temperature, flap setting, etc.), contains various tail wind conditions and calculations of the corresponding ground roll distances for a DC-8 aircraft. (Ex. R-1.) The testimony of the eyewitnesses, in conjunction with the airport map, places the aircraft's takeoff roll somewhere between about 4,300 and 6,000 feet. Using those distances, the chart would indicate wind conditions between 0 and 25 knots, thereby neither proving nor disproving respondents' assertions.

previous official reported visibility was 1½ miles and the subsequent official reported visibility was 3 miles, see Administrator v. Rolund, NTSB Order No. EA-3991 at 4 (1993), recon. denied, NTSB Order No. EA-4123 (1994), our attention has not been directed to any case in which we have accepted a pilot's estimate of wind speed over officially reported wind speeds (which is the best evidence of the actual wind conditions).⁸ We perceive no sound basis for endorsing the position that wind speed can be accurately estimated by simply observing imprecise indicators, such as a wind sock or the movement of blades of grass near the runway.

We agree with the Administrator's assertions that Board precedent does not "give a pilot blanket permission to substitute his own judgment for that of a qualified observer or reliable weather measuring devices on the airport" (Administrator's brief at 16), and that operations contrary to weather minimums are impermissible. In Administrator v. Thomas, 3 NTSB 3203 (1981), despite having made a factual finding that the respondent, at takeoff, had visibility of at least ½ mile, the law judge found that he violated section 91.116(c) because the weather reports included below-minimum visibility. The Board held that the phrase "weather conditions" in FAR section 91.116(c) was not synonymous with "weather reports," in that a violation could not

⁸In Rolund, it was evident that the visibility improved sometime between the two official reportings, thereby making it quite probable that the respondent took off with the requisite 3-mile visibility.

be supported simply by a finding that a pilot took off when the reported weather conditions were not at or above the prescribed minimums. Id. at 3204. This holding, however, was not meant to make the pilot's estimate of visibility binding on the law judge.

"Rather, the import of our decision is that [a] pilot's estimate and the reported visibility, along with other pertinent available information, should be weighed in arriving at the ultimate determination of whether visibility minimums existed." Id. at 3205, n.9. The respondents' essentially subjective determination that the tail wind component was 10 knots or less at the time they executed their takeoff roll simply does not outweigh the contrary evidence established by the reported wind information.⁹

Section 121.537(e) requires that an aircraft be operated in compliance with the pertinent operations specifications which, in this instance, state that the aircraft may not take off when tail wind conditions exceed 10 knots. We believe the Administrator proved by a preponderance of the evidence that respondents did not comply with the applicable operations specifications and were careless in their decision to take off despite the reported

⁹In Administrator v. Witham, NTSB Order No. EA-3282 (1991), we stated:

While the Board recognized in Administrator v. Gaub [5 NTSB 1653 (1982)] that the ever-changing nature of weather conditions may create situations in which an airman may validly substitute his judgment of the prevalent conditions for the reported weather, we also indicated that such judgment must accurately reflect what the actual conditions were at the time.

Id. at 7 (footnotes omitted).

winds.

ACCORDINGLY, IT IS ORDERED THAT:

1. The Administrator's appeal is granted;
2. The initial decision dismissing the charges against both respondents is reversed, except for the dismissal of the 121.3(e) charge against Respondent Tarris; and
3. The 120-day suspension of Respondent Tarris's airline transport certificate and the 30-day suspension of Respondent Thoman's airline transport certificate shall begin 30 days from the date of service of this order.¹⁰

HALL, Chairman, FRANCIS, Vice Chairman, and HAMMERSCHMIDT, Member of the Board, concurred in the above opinion and order.

¹⁰For the purposes of this order, respondents must physically surrender their certificates to an appropriate representative of the FAA, pursuant to FAR § 61.19(f).